

**ABSTRACT**

5 An apparatus for implementing a collision avoidance  
mechanism in a bufferless network. The apparatus includes  
first and second inputs for receiving traffic units from first  
and second source points, respectively. The traffic units from  
the first source point arrive at the first input on a basis of  
a first traffic pattern. The traffic units from the second  
source point arrive at the second input on a basis of a second  
10 traffic pattern. The apparatus further includes a traffic  
detection unit and a notification unit. The traffic detection  
unit is operative to monitor the traffic units received at the  
first and second inputs for detecting the first and second  
traffic patterns. The notification unit is operative to  
15 generate a control signal for transmission to either one of the  
first and second source points on a basis of the detected first  
and second traffic patterns. This control signal is directive  
to regulate at least in part the traffic pattern of the traffic  
units sent from either one of the first and second source  
20 points such that a possibility of collision is reduced.